Swamp Creek Aquatic and Riparian Habitat Enhancement Project
Environmental Assessment Decision Notice

Montana Fish, Wildlife & Parks
Region Three, Bozeman
April 2009

Proposed Action

Montana Fish, Wildlife & Parks (FWP) is proposing to provide funding for and implement a project to enhance the riparian vegetative community, streambank stability, and stream channel morphology in a 6.25 mile-reach of Swamp Creek in the Big Hole River Drainage. The intent of this project is to enhance habitat for fluvial (river dwelling) Arctic grayling and other native and sport fish species within this reach of the Swamp Creek. The treatments involved in the project include: 1) stabilizing and establishing vegetation on a total of 8,100 linear feet of stream bank, and 2) improving instream habitat by relocating 2,600 feet of Swamp Creek into a historic channel. Bank stabilization and vegetation treatments will include 1) transplanting approximately 600 mature willows that will be planted on the outside streambanks, 2) resloping and transplanting sedge sod mats on approximately 4,860 feet of eroding banks, and 3) planting approximately 1,000 rooted willow sprigs. Channel relocation will include excavating approximately 3,500 cubic yards of sediment out of historic channel, resloping and transplanting sedge mats on approximately 3,120 linear feet of stream bank, and transplanting approximately 70 mature willow clusters. Excavated material from the historic channel will be used to construct a series of wetlands in the deactivated channel. The project site is located on property owned by three private landowners and one State trust parcel managed by Montana Department of Natural Resources and Conservation (DNRC). The State Trust Parcel is located at T2S-R15W Section 16. The private land includes property owned by John and Phyllis Erb, (T2S, R15W, Sections 17, 20 and 29), John Nelson (T2S, R15W, Sections 20 and 29), and the Harrington Company (T2S, R15W, Sections 9 and 20). The project is located approximately 3 miles west of the community of Wisdom in Beaverhead County.

Montana Environmental Policy Act

FWP is required by the Montana Environmental Policy Act (MEPA) to assess significant potential impacts of a proposed action to the human and physical environment. In compliance with MEPA, an Environmental Assessment (EA) was completed for the proposed project by FWP and released for public comment on January 21, 2009.

Public comments on the proposed action were taken for 30 days (through February 22, 2009). The EA was mailed to 39 individuals and groups, and legal notices were printed in the *Montana Standard* (Butte, MT) and the *Dillon Tribune*. The EA was also posted on the FWP webpage: http://fwp.mt.gov//publicnotices/

Summary of Public Comment

Two public comments were received during the 30-day review period. The first comment was received from the Montana Wildlife Federation with responses to specific comments elements as follows:

On behalf of Montana Wildlife Federation, Montana's oldest and largest, in-state organization of hunters, anglers, and outdoor recreationists with over 7000 members and 23 affiliated sportsmen's clubs, we offer the following comments on the EA prepared for the proposed implementation of the Swamp Creek Aquatic and Riparian Enhancement Project.

MWF is supportive of the intent of the project and wish to see it completed as scheduled.

We offer the following comments:

1. Funding. What is the funding source for this project? This should be specified beyond simply "Montana Fish, Wildlife and Parks."

FWP Response: The funding for this project will come from a combination of the Federal appropriated State Wildlife Grants (SWG) that has been allocated to the state of Montana to implement the Montana Fish, and Wildlife Comprehensive Management Plan, and matching State funds from Montana Fishing License Dollars.

2. Swamp Creek Flows. No data seem to have been included in the proposal regarding flow volumes and continuity of flow in the stream. This makes a complete appraisal of the potential benefits of the proposed project difficult or impossible.

FWP Response: Each of the three private landowners that are involved in this project are enrolled in the Big Hole Candidate Conservation Agreement with Assurances Program (CCAA). The CCAA requires that each enrolled landowner implement a Flow Conservation Plan. The Flow Conservation Plan is developed by interagency team including FWP biologists, DNRC hydrologist, and the landowners with the goal of improving instream flows. FWP and DNRC are currently working with the landowners involved in this project on Flow Conservation Plans and have been gathering stream flow data and irrigation diversion data from Swamp Creek to better understand flow dynamics and to develop the Flow Conservation Plan.

3. Map. A more detailed map might have offered more insight into the project; e.g. and ownership boundaries, channel section to be reactivated, relationship of the existing and proposed channels to the junction with the Big Hole.

FWP Response: The Design for the Swamp Creek Project will be posted on Montana Fish, Wildlife and Parks web site at:

www.http://fwp.mt.gov/wildthings/concern/grayling.html. The design includes maps and the treatments for the proposed restoration project.

4. Page 3. Item 8a. Securing the required permits in less than two weeks seems rather optimistic.

FWP Response: The sentence should read permits will be **secured** at least two weeks prior to project start.

5. Page 3. Item 9. Para 3. It might be prudent to add to the final sentence regarding improvement of carrying capacity and numbers of grayling the clause, "if project objectives are fully met."

FWP Response: FWP agrees with this statement and makes changes as follows: If project objectives are fully met, carrying capacity and overall numbers of grayling and other native and sportfish species will increase.

6. Page 4. Paragraph 1. Whether the 1000 rooted willow sprigs are to be placed in the 8,000 feet, or 2,600 feet of streambank is unclear, but in either case the willow planting densities seem extremely low.

FWP Response: The design breaks down the restoration project into 13 reaches based on the current vegetation composition and channel geomorphology. Each of the 13 reaches has a treatment, which includes using 3 reaches as controls to assess improvement to vegetation and channel morphology utilizing grazing management without active restoration. The 1,000 rooted willows will be planted on 8,000 linear feet of stream. The 2,600 feet of channel reactivation does not require rooted willows because younger age classes of willow are present. Proposed rooted willow planting densities are based on baseline conditions: how many young willows are currently present and the number of available willows from the Big Hole Willow Brood Stock. If available, the numbers of rooted willows planted from the Big Hole Willow Brood Stock may be increased.

7. Page 4. Paragraph 2. The first sentence refers to newly constructed riparian fence and this feature appears to be an integral part of the project. However, on page 10, comment 5c it is stated that "The recently built riparian fence was constructed...." Which fence is which? It is unclear whether parts of the project have already been completed or which fences are to be considered part of the project.

FWP Response: Construction of a riparian fence for the entire restoration reach was completed in December 2008. This fence will assist with the grazing management plan that in conjunction with this restoration project will improve riparian and channel function. No new fence will be constructed as part of this proposed project.

8. Page 4. Paragraph 2. It is stated that riparian zones may be relieved of grazing pressure for up to 5 years but notes that some riparian areas will continue to be grazed. It would be desirable to show maps of the area delineating which segments will be treated

in which fashion, their lengths, and the duration of grazing prohibition involved. It is understood that individual landowners may have widely differing opinions on grazing restrictions in riparian areas and that they have the ultimate authority to determine the regime that will be imposed on their property. No doubt, whatever changes are made will constitute improvements. It is also useful to consider that up to five years of no livestock grazing, while perhaps the best regimen that can be negotiated, is far from sufficient time for recovery of a severely impacted riparian zone.

FWP Response: As part of the CCAA efforts, Riparian Assessments (NRCS Protocol) are completed on all stream reaches on enrolled landowners property. Based on the current condition of the riparian corridor (Not sustainable, At Risk or Sustainable), a management plan is developed by the cooperating agencies and the landowner with the goal of reaching sustainable conditions in 15 years. Every 5 years the riparian assessments are repeated and if improvement is not seen towards sustainable conditions, the management plan will be changed. The 5-year exclusion for this project will occur on 12 of the 13 reaches in order to provide a window for vegetation to reestablish and stabilize banks to the condition it can be utilized for pasture. After the 5-year exclusion period, a grazing plan will be implemented and monitored to ensure that the riparian condition continues to improve towards sustainability. The one reach that will continue to be grazed is located on the 2,600 feet of the channel reactivation. The riparian conditions in this reach are much better than the other reaches and can be utilized as pasture under a grazing management plan. This plan will be monitored by FWP. If grazing is negatively impacting the riparian conditions, FWP and the landowners will review the plan and make changes. This reach will also serve to assess noxious weed control in the riparian areas by grazing. The remaining reaches will be monitored to assess potential increase for noxious weeds and a weed management plan will be developed if necessary.

9. Page 4. Alternative A: No Action. It is unclear that this, in fact, a no action alternative since it specifies the benefits of "newly constructed riparian fence and the grazing management plan." Is this reference to work included in this proposal or to work previously completed?

FWP Response: The No Action Alternative would be no action beyond constructing the riparian fence (completed in 2008) and implementing grazing management plans. The condition of the riparian corridor and stream channel would improve. However, improvement would not occur as quickly as with the active restoration proposed. Swamp Creek is one of the most important spawning tributaries for the Big Hole Arctic grayling population. Juvenile grayling dominate the age structure in Swamp Creek and depleted numbers of larger older grayling can be attributed to reduced pool and cover habitats. Improving habitat in Swamp Creek should maintain and improve the quality spawning and rearing habitat and specifically improve pool habitats needed for older and larger grayling.

10. General. It would be useful for the reader's comprehension of the totality of the project if data were included regarding existing fish population such as species composition, current numbers, sizes and distribution within the project section.

FWP Response: Swamp Creek fisheries within this project area are completed in the fall of each year. Survey results t results from 2006-2008 are provide in the table below:

	2006		2007		2008	
	Total	**Fish/mile**	**Total**	**Fish/mile**	**Total**	**Fish/mile**
AG - (< 6 ‘’)	**27**	**10**	**20**	**71**	**13**	**5**
AG - (>6”)	**0**	**0**	**1**	**<1**	**3**	**1**
Ling (all sizes)	**77**	**29**	**35**	**13**	**67**	**25**
EBT (> 8”)	**169**	**63**	**187**	**69**	**256**	**95**
LL (All sizes)	**5**	**2**	**0**	**0**	**2**	**<1**
RBT (All sizes)	**1**	**<1**	**4**	**1**	**3**	**1**
Total	**279**		**247**		**344**	

AG: Arctic grayling, Ling: burbot, EBT; eastern brook trout,
LL: brown trout, RBT: rainbow trout

Other species observed but not quantified include mountain whitefish, mottled sculpins, longnose dace, longnose suckers, and common suckers.

11. Public Access. We note that no mention was made of any opportunities associated with the project for recreational angling access. It is our belief that expenditure of fishing license funds should, wherever possible, include provision for public access.

FWP Response: All of the involved landowners allow access with permission. The project also includes a section of state trust land that is open for public access.

12. The Montana Wildlife Federation is appreciative of the opportunity to comment on this proposal and the effort involved in securing agreement to the project from the landowners. We support the funding of the project and encourage its timely implementation.

FWP Response: FWP concurs and will continue to work with landowners and develop projects that benefit fish and wildlife species as well as the diverse publics that utilize these resources.

The second comments was received from DNRC.

The DNRC is in favor of completing the project on state land and is in full support of the preferred alternative. The DNRC states that the project would benefit the riparian corridor and help reestablish a healthy stream zone for fish and wildlife.

Specific Comments

Comment 1: The lessee will need to fill out an improvement request form DS 405. FWP and the lessee will have to have an agreement on who will maintain the fence.

FWP response:
FWP has discussed the project with the lessee and informed the lessee about the DS 405 form. The lessee has agreed to complete the form. FWP and the lessee will make arrangements for the fence maintenance. The lessee will typically complete annual maintenance. FWP may assist with the maintenance in the event of unknown circumstances (fire, earthquake etc.) or with a change to the grazing management plan.

Comment 2: DNRC recommends building the riparian fence to meet BLM standards of a "four wire fence with a maximum top wire height of 42" and a minimum bottom wire height of 16." We recently received a new publication from FWP titled "A landowners guide to Wildlife Friendly Fences: How to build Fence with Wildlife in Mind" that has many useful ideas. We would hope that you could incorporate these standards as closely as possible and still complete the project.

FWP Response: The fence design was negotiated between FWP and the landowners of the project with the goal of meeting the landowner's needs while providing protection to the riparian corridor, the ability to implement a grazing management plan, and to provide wildlife access to and through the riparian corridor. The riparian fence consists of a 5-wire fence with jackleg braces with the top and bottom wire heights at 46"and 14 " respectively. To improve wildlife passage, FWP also incorporated alternatives listed in the guide to "Wildlife Friendly Fences" that includes a drop rail design for the jackleg braces in which the top rail of the jackleg is dropped on one side to allow wildlife passage. In addition, FWP worked with the landowner to identify wildlife migratory corridors and installed 12 stream crossings to facilitate movement. The overall project goal is to progress towards and reach a sustainable riparian condition in 15 years. A healthy riparian corridor will have tremendous benefits to over 150 fish and wildlife species that utilize riparian habitats.

Comment 3: DNRC will not adjust the price that is currently being paid for the lease even though a portion of the riparian area will be fenced off from grazing and a grazing plan established for the fenced out area. The number of AUM's will remain the same and may even increase as the surrounding area around the creek and riparian area improves.

FWP Response: FWP has discussed this with the lessee, and the lessee is aware of and understands that the lease price will not be adjusted.

Comment 3: DNRC will need to know who will be monitoring and enforcing the grazing management plan. The DNRC currently does not have enough personnel to ensure that such a plan is followed and enforced. We hope that FWP could monitor the grazing management plan that is put into place.

FWP Response: The lessee is enrolled in the Big Hole Arctic Grayling Candidate Conservation Agreement with Assurances Program (CCAA). One of the program goals is

to have sustainable riparian conditions in 15 years after the landowner's site-specific conservation plan is developed. To achieve this goal, we have constructed the riparian fence, will implement a grazing management plan, and propose to complete stream restoration focused on improving vegetation in the riparian corridor. The grazing plan is negotiated between the landowner and FWP and other agencies involved in the CCAA Program. As part of the grazing plan, FWP and the agencies will monitor the riparian conditions to determine if the plan is working. Monitoring will include completing Riparian Assessments every 5 years and annual monitoring which will include photo points, stream cross sections, vegetative cross sections, Greenline surveys, instream temperature, instream flows, and fishery surveys. Other monitoring may include vegetation plots, wildlife enclosures and noxious weed inventories. As part of the CCAA Program, the landowner is required to document pasture use and the agencies are required to meet with the landowner two times per year to assess the effectiveness of the grazing management plan.

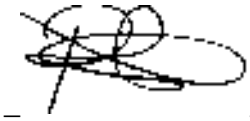
Final Environmental Assessment

There are no modifications necessary to the Draft Environmental Assessment based on public comment other than those provided here. The Draft Environmental Assessment, together with this Decision Notice, will serve as the final document for this proposal.

Decision

Based on the Environmental Assessment, public comment, and the need to preserve fluvial Arctic grayling and its habitat in Swamp Creek in the upper Big Hole River watershed, it is my decision to proceed with the effort to enhance riparian and stream habitats in the proposed reach of Swamp Creek.

I find there to be no significant impacts on the human and physical environments associated with this project. Therefore, I conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.



Patrick J. Flowers
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